

Managing Cyberbullying Impacts In Time of Digital Ecosystem (Lesson Learned from TeensVictims-Actors Evidence from Jakarta)

Desi Setiana¹ Tiroanna¹ Marlina Nasution¹ Norainna Besar² Alifya Kayla Shafa Susanto³

ABSTRACT

Cyberbullying is becoming increasingly common and problematic today due to the emergence of the digital ecosystem. Ultimately, with the many advances that both the internet and digital technology have to offer, this has paved the way for many approaches for cyberbullies to commit cyberbullying to victims, for example, through social media, networking sites, emails, messages, and phone calls. Numerous studies have shown that cyberbullying can cause several serious health problems to victims, including, but not limited to, depression, sadness, loneliness, and even suicidal thoughts. There are various forms of cyberbullying, including flaming, harassment, denigration, impersonation, outing and trickery, exclusion, cyberstalking, and cyber threat. Through qualitative research, this paper aims to analyze the use of social media contributing to cyberbullying, identify the common methods of cyberbullying, assess the impacts of cyberbullying from the perspectives of victims and perpetrators, and discover strategies to prevent cyberbullying. This study found that teenagers who spend most of their time on social media are primarily exposed to cyberbullying and tend to experience humiliation, poor academic performance, and depression. Teens are also more likely to spend more time on digital technology to stay connected with each other and broaden their social world. Thus, the parents' and teachers' interventions are vital in combating the issue.

Keywords: Technology, Misuse, Cyberbullying, Young Teen, ICT Emerging Technology, Digital Ecosystem.

1. INTRODUCTION

The digital ecosystem has evolved significantly in today's advanced world to the extent that everything we are executing, whether in education, business, or basically in our everyday life, lies under the digital ecosystem. Simply put, the digital ecosystem acts as a branch that provides access to remaining in touch with others. As stated in the World Economic Forum 2007, "the digital ecosystem is defined as the space formed by the convergence of the telecommunications, information technology and media and content sectors, and that consists of users, companies, government and

civil society, in addition to the infrastructure that enables digital interactions". Moreover, with the continuous evolution of digital technology, it has become the main reason for the possible existence of the digital ecosystem.

In understanding the context of the digital ecosystem, one needs to view its broader perspective, such as the pros and cons of the term, which can affect users, especially among teens. Using the current situation facing the world today, which is the Covid-19 pandemic, as an example, one of the pros of the digital ecosystem has been beneficial for education where both teaching and learning are conducted

¹Ministry of Law and Human Right, Republic of Indonesia, Indonesia

²Universiti Brunei Darussalam, Brunei Darussalam

³School of Computing and Informatics, University of Technology Brunei, Brunei Darussalam

^{*} Corresponding author. Email: desi.setiana@gmail.com



through digital mode [1], [2], [3], [4]. According to World Economic Forum-2020, there has already been a tremendous use of educational technology before this pandemic; and today the overall online education market has increased significantly since then. Furthermore, the futuristic features of the digital ecosystem have enabled students to continuously learn and adapt to the 'new normal' of online learning and positively applied for the teachers to implement the 'new normal' of teaching and other possibilities such as meeting with other teachers and the parents.

With that stated, the digital environment has its drawbacks, and it is more likely to lead to unethical cyberbullying, particularly among the young population. In the digital environment, there are different social networking sites where cyberbullying is considered necessary among youths to attack the victims and directly harm their social lives. This statement has approved that, although the growth of the digital world allows people to have access to information at any convenience and is through an online platform, the rise for cyberbullying falls under the development of the digital world itself. Moreover, the internet as a tool to exchange or share information has led to more bullying through the digital ecosystem.

Apart from that, the digital ecosystem shapes how users, especially teenagers, are entirely dependent on the internet that can cause these teens to become the victims to fall into the world of the internet. The increase in cyberbullying among teens is undeniable due to digital technology and the popular culture of the teens. Meaning that to be known or to fit themselves into society, they must engage in that culture through social media, such as with the number of likes, views, or friend requests they gain from social media. Only then can they be acknowledged by others. Such a culture has become the platform for the emergence of various negative phenomena, and the same goes for cyberbullying cases. The concept of cyberbullying is complicated to interpret, and in most cases, it gives rise to misunderstandings. Perhaps the simplest definition in understanding cyberbullying is that it occurs because of the culture that teenagers have created with the help of some digital technology, the internet, and social media.

1.1 Problem Statement

As a modern form of bullying, cyberbullying happens in ordinary routine life as quickly as it does when victims of cyberbullying check their mobile phones, laptops, or email. Unfortunately, the victims and those around them may be unaware of the early signs and other factors associated with cyberbullying that can occur in various ways.

1.2 Significance of the Study and Research Ouestions

This study is designed to better understand cyberbullying, which is becoming more prevalent due to the advancement of the digital ecosystem in this constantly changing environment.

This study sought to answer the following research questions:

- 1. How does the constant use of social media contribute to cyberbullying?
- 2. What are the many methods of cyberbullying used?
- 3. What are the significant impacts of cyberbullying on the victims and perpetrators?
- 4. What are the strategies to prevent cyberbullying?

1.3 Objectives

The main objective of this research paper is to reveal that cyberbullying phenomenon occurs over a destructive digital ecosystem among teens. Therefore, to understand the research paper, the followings are the specific objectives of the research:

- 1. To analyze the use of social media contributing to cyberbullying.
- 2. To identify the common methods of cyberbullying.
- 3. To assess the impacts of cyberbullying from the perspectives of victims and perpetrators.
- 4. To discover strategies to prevent cyberbullying.

2. LITERATURE REVIEW

"Cyberbullying" occurs when a person or a group of people use electronic devices such as mobile phones, emails, social networks, blogs, and web pages to bully other people intentionally and repeatedly such as by giving insults, attacking them, and other means with the intention to hurt them [5]. It is an aggressive kind of interaction done online that has the potential to spread widely and could gain attention from bystanders that may know or not know the victim [6]. These people who show the behavior of cyberbullying are known as "cyber bullies" whereas the people who are cyberbullied by them are called "cyber victims" [7]. It was stated in the study that the two types of bullying which are traditional bullying and cyberbullying are interrelated as the ones who are cyberbullied are also the victims of traditional bullying [8].

Cyberbullying can happen to everyone regardless of their gender affiliations, religious heritage, racial and ethnic backgrounds, and even people with disabilities [9]. Research suggested that females are more likely to be involved in cyberbullying compared to males [10]. This is due to the emergence



of new forms of sexual and gender harassment such as "sexting", "virtual rape" and "revenge porn" that affect females more greatly than males. Females are also more prone to cyberbully other females as they tend to be more covert in which suits well with cyberbullying where it can provide anonymity than the traditional bullying.

There are various forms of cyberbullying based on the study [5], [11]:

- 1. Harassment in which the bullies keep insults and offensive messages repeatedly.
- 2. Cyberstalking where victims keep receiving threats and intimidating messages.
- Slandering where bullies spread rumors and gossips with the intention to ruin other people's reputations.
- 4. Breach of privacy where bullies spread out someone's personal information without their consent to the public,
- 5. Password theft, where someone's personal account is hacked to cause them harm.
- 6. Exclusion, where people intentionally leave out someone in an online group.

Not only that, but many students had also reported that they also had been receiving unwanted pornography from the bullies [12]. According to [5] there has been an increase in bullying through electronic technologies among the youths toward their peers. This was all due to the convenience in using technologies among them in this generation where technologies are considered as needs which made the bullying easier online. However [7], [13] stated that it is due to the freedom in the cyber world that could motivate people to bully others as it allows them to hide their identities and do it anonymously. This was proven in a recent study that stated people are more daring to send threatening posts to others if they could be anonymous [6].

There is also another issue that could lead to the increase of cyberbullying which is the lack of involvement of the school regarding the issue. Based on the study by [13], [14] where they mentioned how the schools, even though they are aware of the issue, did not see it as a serious problem. According to [15], cyberbullying happens through four major applications which are chat rooms, instant messaging, emails, and also text messages.

Due to the increasing number of bullying, the involvement of parents, school staff, children, and other professionals is very encouraged in order to reduce it. Therefore parents and adults should increase their knowledge regarding new technologies in order to supervise the youths and their activities in

cyberspace [5]. The parents are also the ones who are responsible for monitoring their children's behaviors outside the school [7]. Based on another study, many youths stated the fear of their parents knowing about them being involved in cyberbullying or their cyber victimization as it could limit their access to technologies, holding them back from interacting in cyberspace [16].

It was seen that most youths lack knowledge regarding cyberbullying and the importance of basic e-security applications in cyberspace [7]. [12] Recommended that it is necessary to educate the youths by creating a clear awareness of cyberbullying and the psychological and legal consequences that can originate from the misuse of technologies towards them, the victims and their families, and social environment. An example taken from the study is when a person had spread a private message about the victim on the social network as a game and just to have fun but it had caused the victim to suffer in which she decided to commit suicide. The case ended up in court with an accusation of intimacy violations. Thus, cyberbullying in any form has to be taken seriously by the school and family members.

According to [17], [18], not only does cyberbullying affect both cyberbullies and cyber victims, but it also affects the bystanders. Bystanders are those who witness cyberbullying in which they can either give support to the victims anonymously or asynchronously. They also stated that when the bystanders decided to intervene, it is so that it will help the victims after the cyberbullying. [19], [20], [21] Also agreed that the role of bystanders is important in bullying in which they further stated that even though these people are not directly involved in the bullying, they can influence the experience of the victims and also the bullies' behavior. For example, when the bystanders decided to help the victims this could lessen the victims' despair and provide them with social support. And if they decided to support the bullies' behavior, this could encourage the bullies more to do what they did. Based on the study, not all bystanders will actually help the cyber victims due to several reasons which are due to fear as they do not want to become the next victims, also not knowing what to do to help, and lastly, they felt like it was none of their business.

[22], [23], [24] Emphasized that students who had been bullied experienced feelings of anxiety, depression, and even suicidal ideation. It was also stated that there was an increase of psychosocial problems in those who were bullied such as drinking alcohol, smoking, depression, not committed in school learning, decreasing in their academic



performances, and having problem behaviors. Based on research conducted by [25], [26], [27], students had reported how cyberbullying affected their academic performance as they were not able to do their assignments because they were emotionally and physically unstable. [28], [29] Stated that students who are cyberbullied have poor physical health and are more prone to have headaches, stomachaches, poor appetites, and insomnia compared to others. These show how the experience of being cyberbullied really affects the students negatively in many aspects especially towards their health and well-being.

According to [8], [30] female victims were strongly related to depression that could lead to suicide attempts. There were even extreme cases where students had committed suicide due to being cyberbullied like what had happened in Canada based on a recent study [13], [30]. The first case was about a 15-year-old girl named Amanda Todd who committed suicide in 2012 because she was harassed. An embarrassing photo of her has been spread around and she was bullied for it. Another case was about a 17-year-old girl named Rehtaeh Parsons where a photo of her being sexually violated was sent to her peers which caused her to get cyberbullied and made her commit suicide.

Based on a study, students claimed that cyberbullying is worse than traditional bullying or face-to-face bullying as it can cause so much harm both physically and mentally just through technologies [27]. This was proven in another study where it stated that cyberbullying can cause equal or even extreme damage to the victims psychologically compared to traditional bullying as there are no limits on the Internet [15]. It was also stated in the study that even the teachers agreed with the statement because cyberbullying can be done anonymously so it is difficult to handle that kind of situation.

[7] Said that supports from family, friends, and teachers play a major role in reducing the negative effects caused by bullying. Those who have a high level of support from their family and friends will decrease the possibility of them being cyberbullied. The parents can provide social support to their children by listening to their problems and concerns, helping them with their struggles, and just showing them that they truly care. These could help develop their sensitivity towards cyberbullying. Whereas [31], [32] believed that health care providers (HCPs) could also help in reducing cyberbullying. Health care providers consist of physicians, social workers, nurses, and also psychologists where they help prevent cyberbullying by educating the youths. It

was also proven that cyber victims do want their supports. Health care providers also have the opportunities for collaborations with the school to make better social relationships as well as provide support and educate the teachers on how to handle cyberbullying issues.

3. RESEARCH METHODOLOGY

3.1. Research design

The research method used to study these research objectives was a mixed methods approach. The more dominant approach will be using the quantitative questions while there will be some qualitative questions to add depth understanding on the result. Quantitative questions are for testing the hypotheses and theories by collecting the data followed by analyzing the data. The qualitative questions are to develop theories as well as to understand their experiences including personal meanings and feelings. By using both or a mixed-methods approach for this research, it will provide a more complete and comprehensive understanding of the research question. This study will mean that the participants in this study were not only asked about their current experience but also asked to reflect back on their past experiences or anyone around them that ever experience cyber-bullying. The time frame for them to reflect back is between the ages of 10 to 24 years old.

3.2. Sampling method/techniques

The target for this study will be around 200 to 250 respondents. This can only be set to target a certain amount but then again it can only be seen on how many participants are willing to answer the survey. Random selection of individual students, random classes, and random public participants is preferred for the research to ensure complete secrecy and to protect them from any negative consequences. That is from year 6 of primary school, upper or lower secondary school students, higher institutions students, university students.

Participants from primary schools, secondary schools as well as higher institutions will be given a printed survey. In order to collect the data, the survey will be collected from one school (of primary and secondary school) from different districts such as secondary schools from South Jakarta District. Others such as University Students are being emailed to each *student*; and for the public, the surveys are forwarded through WhatsApp and social media such as Facebook. The research questions will begin with a brief explanation of what is the purpose of the study, the brief details of the topic, confidentiality, and the link to the survey.



3.3. Data collection strategy

The data collection instrument will be using an online survey. The survey contains questions that could be answered in a variety of ways such as openended questions where they can fill in their own responses, multiple-choice questions where they will be able to select choice provided, and questions that allow the participants to select more than one answer. The questions consist of demographic questions, general cyber-bullying questions, and methods used for cyber-bullying,

3.4. Data analysis method

The respondents' responses are organized in a tally and put into a table. The data was presented, evaluated, and construed using weighted mean, frequency counts, and percentage.

Percentage computation:

 $% = f/n \times 100$

Where:

% = percentage

 \mathbf{f} = number of respondents for every point

n= total number of respondents

4. RESULT AND DISCUSSION

Given the rapid development of modern technology in the 21st century, the majority of people own and use gadgets that are connected to the internet. This enables limitless communication between one individual to another, across borders and demographics. The capability of smartphones eases users, particularly students, in gaining knowledge and information which were difficult to be accessed before. After analyzing the data regarding each research questions, some relations were identified and indicating that a majority of respondents were a victim of cyberbullying especially during their school years.

According to the results from the researcher's point of view, gender does play an important role as most of the cases were obtained from female respondents three times more than males, especially in younger generations. Even though there are more females, the frequency of males also increases which can also be analyzed based on the results. From the analysis, youth were mostly bullied; as more than half of the population obtained were bullied between the age of 20 to 25 years old. It is also that according to the study, youth aged 25 to 30 years old are most likely to report cyberbullying than the older generations beyond 30 years old.

4.1 Causes of Cyberbullying

Cyberbullying raises a major concern towards students given the amount of time spent on the internet, specifically when using social media. Social media such as Instagram, Facebook, and WhatsApp are the most prone of websites to be used as mediums to cyberbullying. In 2017, the worldwide average time spent daily online using a smartphone by generation Z(16-20 years) was 250 minutes per day, whereas millennials (21-34 years) spent a total of 223 minutes per day.

There are numerous reasons why cyberbullying occurs or what motivates an individual to resort to cyberbullying. In contrast to traditional bullying, cyberbullying eliminates the physical requirement to act. This means the absence of face-to-face exchange of hateful speech towards one individual motivates people to cyberbully. This is mainly due to most cyberbullies considering themselves as "invisible" and cannot be detected to face their consequences. The complication in identifying these cyberbullies also plays a role in the execution of this immoral action.

There is a direct correlation between parental autonomy support and adolescents' overall behavior. The term 'parental autonomy support' can be defined as supportive actions provided by parents to their children to help in nurturing and developing their inner motivational resources through acknowledging the adolescent perspectives and offering supportive ideas. There is an indirect connection between parental autonomy support and cyberbullying that further proposes how adolescents behave when the need for autonomy is provided. A satisfied adolescent, in this case, a student, will be able to determine the differences between good and bad behaviors, acknowledge various emotions and develop empathy towards other people. This, in turn, creates a barrier for the student to practice cyberbullying.

4.2 After-effect of cyberbullying on students

Cyberbullying can affect a victim's life day and night unceasingly, unlike traditional bullying, as soon as the student reach home, the activities stop. However, whether traditional bullying or cyberbullying, emotionally suffer and psychologically. The victims of cyberbullying have an impact on their emotional health and well-being. There are a lot of consequences of cyberbullying faced by the victims such as anger, fear of exclusion, avoiding peers and activities, depression, causing an illness which includes headache, stomachache or other physical ailments, feeling humiliated,



unwillingness to attend the school which led to poor academic performances, and low self-esteem. The consequences may become worse if untreated; victims may become suicidal, use drugs, and fall into alcoholism.

4.3 The effects of cyberbullying led to depression, suicidal ideation, drug abuse, and alcoholism

The previous study has shown that a higher level of depression and suicidal tendencies, an increase in emotional distress, externalized hostility, and delinquency are revealed by victims of cyberbullying than non-victim. It is shown that the level of depression is associated with the level and degree of cyberbullying faced by the victim.

Additional studies reported around 65% of college students use alcohol. There is a positive relationship between depression and alcohol use and thus heavy drinking led to a high-risk factor for suicide. It is also shown that female college students are more likely to be involved in cyberbullying and it is proven that cyberbullying among females results in a higher depression level than among male college students. Additional studies reported cyberbullying is often associated with depression, a feeling of helplessness anxiety, and vulnerability. It is shown that victims may carry symptoms up to their Another major consequence cyberbullying has to do with the "digital self". "Digital self" or "online self" consists of the victim's online photos, quotes, comments, and contacts. Depression is highly related to suicide. In the United States, suicide is the third leading cause of death among young adults, a total of 13.8% have considered suicide while 6.3% had attempted it. Previous studies have proven that there is a major relationship between victims of cyberbullying and emotional disorder, the results point out that there is a major relationship between cyber victimization and depression among young adults.

4.4 The effects of cyberbullying led to anger, violence, and aggressiveness

There is a relationship between anger and cyberbullying due to electronic devices may be available in the state of anger. The increase in violence and aggressiveness shown by the victims may be due to the use of substances because of bullying and suicidal thought. Other studies also have shown that victims will perform suicidal behavior when there is an increase in violent behavior. Previous studies have shown that the cyberbullying perpetration on young adults has affected their well-being, they were more likely to be

involved in behavior problems such as aggression, property damage, illegal acts, drug use, and suicidal tendencies. Additional studies also reported cyberbullying perpetration positively correlate with hyperactivity, relational aggression, conduct problem, smoking, and alcoholism.

4.5 The effects of cyberbullying led to health problems

Cyberbullying has caused stress to cyber victims. Previous studies found that victims of cyberbullying experienced at least one symptom of stress. Additional studies have shown that an increased rate of trauma symptoms experienced by victims of online harassment. Another study, also indicates that cyber victims were concerned with their safety. Therefore, cyberbullying is more stressful than traditional bullying. In comparison to traditional bullying, cyberbullying victims majority little to less likely to know their bully. Thus, increase in their fear. Obviously, the bully may be among their circle according to recent. The study found that there is an increased fear of victimization related to cyberbullying victimization. Additionally, cyber victims reported they experienced embarrassment, hurt, blaming themselves, and anxiety. Different levels of cyberbullying may result in different reactions from the victims. It is proven that different media of cyberbullying, for example using mobile phones or computers, may result in different psychological consequences. The study also examines cyber victimization via mobile phones, which includes instant messaging, and phone calls.

4.6 The effects of cyberbullying on cyberbully/perpetrator

On the other hand, the bullies are at risk too as they may also be involved in anti-social behavior such as drug abuse and alcoholism. A study has shown that the perpetrators of cyberbullying also suffer health problems. For example, a female young adult who cyberbullies her peers has been found to suffer depression and anxiety. Additional studies have shown that the perpetration of cyberbullying is positively related to an increase in drug abuse.

4.7 The effects of cyberbullying in academic performance

Cyberbullying and cyber harassment have a negative influence on academic achievement. A survey showed a relation between physical, psychological, and academic to both traditional bullying and cyberbullying. Similarly, there were possible negative effects between traditional bullying and cyberbullying on which if the



cyberbully and victims were male participants. The male participants reported they experience negative behavior physically and psychologically as well as academically due to the effect of cyberbullying. Students who were cyberbullied were academically and emotionally distressed. About 95% of the respondents reported they were scared and worried about cyberbullying in the classroom. Additionally, 255 participants reported that there is an effect of cyberbullying on academic performance.

4.8 What do witnesses do when facing cyberbullying?

There is a heavy emphasis on students witnessing an occurrence of cyberbullying to intervene and react appropriately. The issue of cyberbullying will be elongated when there is no action taken by bystanders when witnessing the problem. One way is to encourage or educate students toward steps on what action should they take when witnessing cyberbullying. Not only this, students should be able to logically determine when there is an act of cyberbullying happening in front of them, especially given the consistent development of technology and how fast information is being transmitted in this ITdriven era. Students witnessing cyberbullying may easily be influenced by the 'bystander effect'. It can be defined as a phenomenon that dictates the willingness of witnesses to report an occurrence of an immoral act. The higher the number of people present, the lesser they are expected to take responsibility in reporting the issue. Especially in the online community, it is inevitable to have more than one witnesses experiencing cyberbullying in action. This creates an assumption that other people would actually stand up for the victim and take corrective action towards the bully. Bystanders often involve themselves with decision-making on whether or not to react to a certain situation that they're facing. In this case, any individual witnessing cyberbullying on the internet will enter a phase of deciding whether or not to respond to the situation by involving themselves in the problem or simply just dismissing any kind of responsibility to it.

4.9 Students' opinions regarding cyberbullying

To understand students' opinions and assumptions concerning cyberbullying, the term itself needs to be properly identified to lay down the foundation on which they understand this anti-social phenomenon. Most students are unaware of the significant impact cyberbullying can cause on the victims. Given the nature of the internet, anyone from across the globe can cause emotional and even

physical harm to the victims at any given time and with only using the internet as the medium.

4.10 On Cyberbullying being regarded as mere playful gestures

Most students are aware of the presence of cyberbullying on the internet, but some found the teasing and mocking to be just playful gestures that are to be expected across all social media sites. Students participating in the online community, specifically the online gaming community, are more than ever to be exposed to a higher chance of cyberbullying in the shape of verbal harassment. Online gamers are more than likely to cast their frustrations by throwing tantrums and crust languages to mock their teammates at any given circumstances. Given the significant differences in the types of cyberbullying, it can be concluded that students have different opinions towards these varieties. The most typical variation of cyberbullying behaviors is usually through the conduct of "special tricks" as well as "insulting/sexual/threatening social interactions in online games." In addition, a considerable number of famous online personas are indirectly promoting the act of cyberbullying merely as a typical social interaction that would have little to no impact on others. Media such as YouTube and Twitter are filled with creators/contributors that are capitalizing on their audiences' self-satisfaction to behave negatively towards an individual in which these behaviors are considered acts of cyberbullying. This in turn creates an understanding in adolescents and other related parties to treat cyberbullying with less concern, thus practicing it with no hesitation.

Some students have also expressed their concern regarding the capability of one individual to make a stand in cyberbullying. As mentioned by some of the students during the research, they are convinced that it is close to impossible for any individual to do anything when the act of cyberbullying happened.

4.11 Extra efforts from other parties surrounding the student

Despite the perception of not being able to do anything, some students also suggested that collective efforts need to be executed in order to effectively minimize the act of cyberbullying especially at schools. It is important for the school, the family, and the students themselves to admit responsibilities. Adequate information and attention from teachers and family respectively will also result in better online behaviors for the students. By providing a supportive surrounding for the student to develop and evolve mentally, numerous anti-social



behaviors can be prevented and this will actually help eradicate the cyberbully and aid cyber victims in recovering from their experiences.

As stated above, schools need to have a set of policies or standardized regulations concerning online conduct between students. This will minimize the need for the school to respond in the event of cyberbullying occurring outside of the school. But when there is apparent misconduct between two or more students within the same school, preventive and corrective measures are expected to be carried out to handle the situation. These measures may be in terms of punishments, detentions, and counseling. Cyberbullying is an act that can be executed from any location and through a significant number of mediums. Parents play a vital role in monitoring and controlling their adolescents' online usage, regardless of where they are using it. For instance, the "alwayson" generation is more likely to find accessing the internet as a daily routine and as a means to release their stressful day or frustrations.

Identifying the culprits will be less complicated when students within the school are encouraged to report incidents relating to cyberbullying. Thus, in order to improve the frequency and willingness of students to report such incidents, there must be ease of the means to which they are able to report them to the related parties. Communication between students and teachers/lecturers is expected to be convenient and straightforward. By giving the student a simple method to report, cyberbullying victims and culprits can be identified and be taken into action.

5. CONCLUSION

With the rapid growth of modern technologies in this generation, it is important especially for the youths to understand the issue regarding cyberbullying and its consequences. Parents and schools play an important role in helping the youths overcome cyberbullying and the negative aftereffects in terms of academic performances and psychosocial problems. Both the parents and schools should also take serious measurements to monitor the youths and their activities in cyberspace. The roles of bystanders and health care providers are also important. Bystanders can influence the activity of the cyberbullies and affect the cyber victims' experiences whereas health care providers can and spread awareness regarding cyberbullying which could help to prevent or stop it from happening. In the report, we had identified and discussed the causes and the impacts of cyberbullying. We had also addressed students' opinions with regards to cyberbullying. Although cyberbullying could not be eliminated right away but with proper guidance and clear social awareness, it will not be impossible. Cyberbullying could really affect students' personal embarrassment to self-harm, depression, and anxiety. Cyberbullying is regarded as a mere playful gesture, resulting in conflict between gamers, vloggers, or YouTubers because they thought it was only a fun thing but different people have different views on it. To maximize one self-satisfaction could as well giving others negative impacts and this is also called cyberbullying by using social media and video games.

In any school or organization, there should be steps to minimize cyberbullying; this would really aid the community as well as people to get rid of cyberbullying and if possible to fully eradicate it. If only other surrounding relevant parties are determined in lending extra efforts working together to handle this rising issue by having coordinated focus, giving awareness regarding this emerging issue of cyberbullying and online harassment. All of those statements have shown that cyberbullying is a very dangerous act that could give devastating consequences to its victims and more concern to students who are affected because they are still enrolling in their schools. It is also called a threat of violence and also indirectly creates a disruptive environment at schools. Hence, schools should pass anti-bullying policies to ensure this issue can be managed in the best ways possible.

6. RECOMMENDATIONS

Sometimes, people who are being bullies are not aware or not sure if they are being bullied and they tend to do nothing about it. Therefore, it is important for a person and it is everyone's responsibility to take down and report with regards to cyber-bullying. Tell teens to never share their important or personal information as well as not to share their passwords with others except their parents. Tell them to not trust new people easily especially the people that they meet online. Teens also need to be away or turn off their technology at a certain time to spend their time with family or friends and have good boundaries and rules on using the internet. People that are being bullied usually tend to feel embarrassed and hesitate to take action or even make a report the bully. Thus, it is essential for them to seek help from trusted adults. Begin with reaching out to the people they are close with such as parents, family members, or teachers. Tell the whole story of how it started and they might help to figure out the solutions. If the cyberbully is anonymous it is more appropriate for them to make a report to the police as they can help to track them down. Cyberbullies feel that they have the power to



harass and threaten others. Therefore, it is important for the victim of cyberbullies to walk away and ignore it all. That does not mean the victim is a coward but it is more useful for them to do other things rather than engage with the bullies. If the victim decided to respond to cyberbullying it is better for them to save evidence, if possible is to identify the cyberbully, and even tell the cyberbully to stop. All devices or sites have the setting for the user to make a report and the block button. Hence, it is essential to make a report of bullying and block the bully by saving all of the pieces of evidence with regards to the bullying as it will help to prove the case. If there is anyone such as our friends or family members that we are aware of being the victim of cyberbullying, stand up for them and tell them it is not okay to let others bring them down and they need to stand up for themselves. The victim of cyberbullying should talk to a counselor or therapist to overcome harmful effects which may lead to suicide if it is not treated early.

REFERENCES

- [1] Susanto, H., Almunawar, M.N. (2019).

 Managing Compliance with an Information
 Security Management Standard. In
 Encyclopedia of Information Science and
 Technology, 3rd ed.;IGI Global: Hershey, PA,
 USA, 2015; pp. 1452–1463.
- [2] Susanto, H.; Leu, F.-Y.; Caesarendra, W.; Ibrahim, F.; Haghi, P.K.; Khusni, U.; Glowacz, A. (2020). Managing Cloud Intelligent Systems over Digital Ecosystems: Revealing Emerging App Technology in the Time of the COVID19 Pandemic. Appl. Syst. Innov. 2020, 3, 37. [CrossRef]
- [3] Susanto, H.; Almunawar, M.N. (2018). Information Security Management Systems: A Novel Framework and Software as a Tool for Compliance with Information Security Standard; CRC Press: Boca Raton, FL, USA.
- [4] Susanto, H.; Chen, C.K.; Almunawar, M.N. (2018). Revealing Big Data Emerging Technology as Enabler of LMS Technologies Transferability. Internet of Things and Big Data Analytics Toward Next-Generation Intelligence; Springer: Cham, Switzerland; pp. 123–145.
- [5] Buelga, S., Cava, M. J., Musitu, G., & Torralbu, E. (2015). Cyberbullying aggressors among Spanish secondary education students: an exploratory study. Interactive Technology and Smart Education, 12(2), 100-115. https://doi.org/10.1108/ITSE-08-2014-0025

- [6] Young, R., Miles, S., & Alhabash, S. (2018). Attacks by Anos: A Content Analysis of Aggressive Posts, Victim Responses, and Bystander Interventions on a Social Media Site. Social Media + Society, 1-14. https://doi.org/10.1177/2056305118762444
- [7] Akturk, A. O. (2015). Analysis of Cyberbullying Sensitivity Levels of High School Students and Their Perceived Social Support Levels. Interactive Technology and Smart Education, 12(1), 44-61. https://doi.org/10.1108/ITSE-07-2014-0016
- [8] Bauman, S., Toomey, R. B., & Walker, J. L. (2013). Associations among bullying, cyberbullying, and suicide in high school students. Journal of Adolescence, 36(2), 341-350.https://doi.org/10.1016/j.adolescence.201 2.12.001
- [9] Oravec, J. M. (2018). Cyber Bullying. Category: Cyber Crime, Cyber Bullying, and Digital Terrorism, 1695-1696.
- [10] Faucher, C., Jackson, M., & Cassidy, W. (2014). Cyberbullying among University Students: Gendered Experiences, Impacts, and Perspectives. Education Research International. Retrieved from https://www.hindawi.com/journals/edri/2014/698545/
- [11] Cowie, H. (2013). Cyberbullying and its impact on young people's emotional health and wellbeing. The Psychiatrist, 37(05). https://doi.org/10.1192/pb.bp.112.040840
- [12] Walker, C. M., Sockman, B. R., & Koehn, S. (2011). An Exploratory Study of Cyberbullying with Undergraduate University Students. TechTrends, 55(2), 31-32.
- [13] Espelage, D. L., & Jun, S. H. (2017). Cyberbullying Prevention and Intervention Efforts: Current Knowledge and Future Directions. The Canadian Journal of Psychiatry, 62(6), 374-380.
- [14] Faryadi, Q. (2011). Cyber Bullying And Academic Performance. International Journal Of Computational Engineering Research.
- [15] Zalaquett, C. P., & Chatters, S. J. (2014).
 Cyberbullying in College: Frequency,
 Characteristics, and Practical Implications.
 SAGE Open. DOI:
 10.1177/2158244014526721
- [16] Mitchell, K. J., Finkelhor, D., Jones, L. M., & Wolak, J. (2012). Prevalence and characteristics of youth sexting: a national study. Pediatrics, 129(1), 13–20. https://doi.org/10.1542/peds.2011-1730



- [17] Susanto, H.; Chen, C.K. (2017). Information and Communication Emerging Technology: Making Sense of Healthcare Innovation. Internet of Things and Big Data Technologies for Next Generation Healthcare; Springer: Cham, Switzerland; pp. 229–250.
- [18] Susanto, H.; Almunawar, M.N.; Leu, F.Y.; Chen, C.K. (2016). Android vs iOS or Others? SMD-OS Security Issues: Generation Y Perception. Int. J. Technol. Diffus. 7, 1–18. [CrossRef]
- [19] Olenik-Shemesh, D., Heiman, T., & Eden, S. (2017). Bystanders' Behavior in Cyberbullying Episodes: Active and Passive Patterns in the Context of Personal-Socio-Emotional Factors. Journal of Interpersonal Violence, 32(1), 23-48.
- [20] Randa, R. (2013). The influence of the cyber-social environment on fear of victimization: Cyberbullying and school. Security Journal, 26(4). https://doi.org/10.1057/sj.2013.22
- [21] Rasidah Hj Abu Bakar, (2018, May 12) Antibullying campaign to launch nationwide this July, as schools see a rise in reported incidents
- [22] Hinduja, S. & Patchin, J. W. (2014). Cyberbullying Identification, Prevention, and Response Cyberbullying Research Center (www.cyberbullying.us)
- [23] Kowalski, R. M., & Limber, S. P. (2013). Psychological, physical, and academic correlates of cyberbullying and traditional bullying. The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine, 53(1 Suppl), S13–S20. https://doi.org/10.1016/j.jadohealth.2012.09.0
- [24] Litwiller, B. J., & Brausch, A. M. (2013). Cyberbullying and physical bullying in adolescent suicide: the role of violent behavior and substance use. Journal of Youth and Adolescence, 42(5), 675–684. https://doi.org/10.1007/s10964-013-9925-5
- [25] Lonigro, A., Schneider, B. H., Laghi, F., Baiocco, R., Pallini, S., & Brunner, T. (2015). Is cyberbullying related to a trait or state of anger? Child Psychiatry and Human Development, 46(3), 445–454. https://doi.org/10.1007/s10578-014-0484-0
- [26] Naffi, N. (2018, February 20). Don't be a bystander: Five steps to fight cyberbullying, The Conversation, retrieved on 31st August 2018, from http://theconversation.com/dont-be-a-bystander-five-steps-to-fight-cyberbullying-91440

- [27] Nilan, P., Burgess, H., Hobbs, M., Threadgold, S., & Alexander, W. (2015). Youth, Social Media, and Cyberbullying Among Australian Youth: "Sick Friends". Social Media + Society, 1-12.
- [28] Nixon, C. L. (2014). Current perspectives: the impact of cyberbullying on adolescent health. Adolescent Health, Medicine and Therapeutics, 5, 143–158. https://doi.org/10.2147/AHMT.S36456
- [29] Selkie, E. M., Kota, R., Chan, Y.-F., & Moreno. M. (2015).Cyberbullying, depression, and problem alcohol use in female college students: a multisite study. Social Cyberpsychology, Behavior and Networking, 18(2),79-86. https://doi.org/10.1089/cyber.2014.0371
- [30] Statista, (2017). Average daily time spent online by teenage and Millennial Internet users worldwide as of 2nd quarter 2017, by device (in minutes), retrieved on 30th.
- [31] Susanto, H. (2018). Smart mobile device emerging Technologies: An enabler to Health Monitoring system. In High-Performance Materials and Engineered Chemistry; Apple Academic Press: Boca Raton, FL, USA; pp. 241–264.
- [32] Springer: Cham, Switzerland; pp. 123–145.Susanto, H. (2017). Electronic Health System: Sensors Emerging and Intelligent Technology Approach. In Smart Sensors Networks; Elsevier: Cambridge, MA, USA; pp. 189–203.